

XXVI. *A Letter from Mr. Bernard, of Deptford, to Mr. Robertson, Lib. R. S. containing a short Account of an Explosion of Air, in a Coal-Pit, at Middleton, near Leeds in Yorkshire.*

S I R,

Read Feb. 25, 1773. **I** Have at length procured, from my father, a memorandum made by him on the spot, of the effects of foul air set on fire, which I have copied exactly. If it affords you the least satisfaction, I shall be well pleased, though late, in having fulfilled my promise.

I am, with great respect,

Yours,

Grove-Street, Deptford,
January 12, 1773.

W. Barnard.

M E M O-

M E M O R A N D U M.

BEING engaged in Middleton wood, the estate of — Brandling, Esq; near Leeds in Yorkshire, in directing the falling and barking of a large quantity of timber bought of him in May 1758, I was witness of the following accident. Some miners, being to renew their operations on the shaft of a coal-pit, which, in a former year, had been sunk to the depth of sixty yards, in order to get through a stratum of very hard stone, thought proper to drill holes, and fill them with gunpowder. They afterwards, from the top, threw down fire to blast the stone, which made a report little louder than that of a pistol; but the blaze, setting the foul air on fire, produced an effect truly shocking. The whole wood was shaken, the works at the mouth of the pit were all blown to pieces, and the explosion was such as cannot be described. The vacuum in the air was so considerable, that oak trees of a load or more each, at a great distance from the pit's mouth, that before stood upright, stooped towards the pit very much, and must have fallen wholly down, had not the air been instantly replaced. The bark-pullers, at a quarter of a mile from the pit, were so alarmed by the shaking and explosion, that not one of them would have remained in the wood, had they attempted to blast it again.

N. B. The trees in the whole circuit stooped towards the pit.